CPC COOPERATIVE PATENT CLASSIFICATION

F25C PRODUCTION, WORKING, STORING OR DISTRIBUTION OF ICE (frozen sweets,

including ice-cream, their production <u>A23G 9/00</u>; concentrating solutions by removing frozen solvents <u>B01D 9/04</u>; purification of water by freezing <u>C02F 1/22</u>; refrigeration machines, plants or systems <u>F25B</u>; solidification of gases or gaseous mixtures <u>F25J</u>; freeze drying <u>F26B</u>)

NOTE

Within the subclass, the term "ice" means any frozen liquid and is to be understood as also covering frozen semi-liquids or pasty substances.

1/00	Production of ice (<u>F25C 3/00</u> takes precedence)	5/043	• • • {Tools, e.g. ice picks, ice crushers, ice shavers}
1/02	 Production of natural ice, i.e. without refrigeration 	5/046	• • • {Ice-crusher machines}
1/04	 by using stationary moulds 	5/06	• • by deforming bodies with which the ice is in
1/045	• • {with the open end pointing downwards}		contact, e.g. by inflatable members
1/06	• open or openable at both ends	5/08	by heating bodies in contact with the ice
1/08	 by immersing freezing chambers or plates into water 	5/10	using hot refrigerant; using fluid heated by
1/10	 by using rotating or otherwise moving moulds 		refrigerant
	(<u>F25C 1/08</u> takes precedence)	5/12	Ice-shaving machines
1/12	by freezing water on cooled surfaces, e.g. to form	5/14	Tools or machines for shaping or finishing ice
	slabs		pieces, e.g. ice presses
1/125	• • {on flexible surfaces}	5/16	. Tools or devices for ice handling not covered by any
1/14	to form thin sheets which are removed by		other subclass
	scraping or wedging	5/18	Storing ice
1/142	• • • {from the outer wall of a cooled body}	5/182	• • { Ice bins (distributing arrangements therefor
1/145	• • • {from the inner wall of a cooled body}		<u>F25C 5/007</u>)}
1/147	• • • {by using augers}	5/185	• • • {combined with freezing trays}
1/16	 by partially evaporating water in a vacuum 	5/187	• • • {combined with ice level sensing means}
1/18	• of a particular transparency or translucency, e.g. by	2200/00	
	injecting air	2300/00	Special arrangements or features for production, working, storing or distribution of ice
1/20	• • by agitation		working, storing or distribution of ice
1/22	 Construction of moulds; Filling devices therefor 	2301/00	Special arrangements or features for the
	(metering by volume in general <u>G01F</u>)		production of ice
1/225	• • {Filling devices for moulds}	2301/002	Production of ice slurries
1/24	• • for refrigerators, e.g. freezing trays	2303/00	Special arrangements or features for the
1/243	{of plastic materials}	2303/00	
1/243 1/246	 { of plastic materials } { with separate grid structure }	2505/00	production of ice or snow for winter sports or
1/246	• • • { with separate grid structure }	2505/00	
		2303/00	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting
1/246	• • • { with separate grid structure } Methods or apparatus specially adapted for the	2303/042	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for
1/246	{with separate grid structure} Methods or apparatus specially adapted for the production of ice or snow for winter sports or		production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow
1/246	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for	2303/042	 production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas
1/246	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports	2303/042	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas Snow making by using low pressure air ventilators,
1/246	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in	2303/042 2303/044 2303/046	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas Snow making by using low pressure air ventilators, e.g. fan type snow canons
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1/246 3/00 3/02	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C)	2303/042 2303/044 2303/046 2303/048	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas Snow making by using low pressure air ventilators, e.g. fan type snow canons Snow making by using means for spraying water with the use of compressed air Special arrangements or features for working or
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1/246 3/00 3/02	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of	2303/042 2303/044 2303/046 2303/048 2303/0481	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas Snow making by using low pressure air ventilators, e.g. fan type snow canons Snow making by using means for spraying water with the use of compressed air Special arrangements or features for working or
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1/246 3/00 3/02 3/04 5/00	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice	2303/042 2303/044 2303/046 2303/048 2303/0481 2305/00	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow Snow making by using solid ice, e.g. ice crushing Snow making using additional features, e.g. additives, liquid gas Snow making by using low pressure air ventilators, e.g. fan type snow canons Snow making by using means for spraying water with the use of compressed air Special arrangements or features for working or distributing ice Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production,
3/00 3/02 3/04 5/00 5/002	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice { Distributing ice}	2303/042 2303/044 2303/046 2303/048 2303/0481 2305/00 2305/022 2400/00	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice
3/00 3/00 3/02 3/04 5/00 5/002 5/005	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice {Distributing ice} {particularly adapted for household refrigerators}	2303/042 2303/044 2303/046 2303/048 2303/0481 2305/00 2305/022 2400/00	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice . Freezing surface state
3/00 3/02 3/04 5/00 5/002	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice {Distributing ice} {particularly adapted for household refrigerators} {for storing bins (ice bins in general	2303/042 2303/044 2303/046 2303/048 2303/0481 2305/00 2305/022 2400/00 2400/02 2400/04	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice . Freezing surface state . Ice guide, e.g. for guiding ice blocks to storage tank
3/00 3/00 3/02 3/04 5/00 5/002 5/005 5/007	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice {Distributing ice} {particularly adapted for household refrigerators} {for storing bins (ice bins in general F25C 5/182)}	2303/042 2303/044 2303/046 2303/048 2305/00 2305/022 2400/00 2400/02 2400/04 2400/06	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice . Freezing surface state . Ice guide, e.g. for guiding ice blocks to storage tank . Multiple ice moulds or trays therefor
3/00 3/00 3/02 3/04 5/00 5/002 5/005	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice {Distributing ice} {particularly adapted for household refrigerators} {for storing bins (ice bins in general F25C 5/182)} Tools or machines for disintegrating, removing or	2303/042 2303/044 2303/046 2303/048 2305/00 2305/022 2400/00 2400/02 2400/04 2400/06 2400/08	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice . Freezing surface state . Ice guide, e.g. for guiding ice blocks to storage tank . Multiple ice moulds or trays therefor . for different type of ice
3/00 3/00 3/02 3/04 5/00 5/002 5/005 5/007	Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports E01C 13/10; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes E01H 4/00) for ice rinks (shape of rinks A63C 19/10; construction of rinks E01C) for sledging or ski trails; Production of artificial snow (shape of trails A63C 19/10; construction of trails E01C) Working, storing or distribution of ice {Distributing ice} {particularly adapted for household refrigerators} {for storing bins (ice bins in general F25C 5/182)}	2303/042 2303/044 2303/046 2303/048 2305/00 2305/022 2400/00 2400/02 2400/04 2400/06	production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow . Snow making by using solid ice, e.g. ice crushing . Snow making using additional features, e.g. additives, liquid gas . Snow making by using low pressure air ventilators, e.g. fan type snow canons . Snow making by using means for spraying water . with the use of compressed air Special arrangements or features for working or distributing ice . Harvesting of ice including rotating or tilting or pivoting of a mould or tray Auxiliary features or devices for production, working, storing or distribution of ice . Freezing surface state . Ice guide, e.g. for guiding ice blocks to storage tank . Multiple ice moulds or trays therefor

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F25C

2400/14	• Water supply
2500/00	Problems to be solved
2500/02	Geometry problems
2500/04	Calculation of parameters
2500/06	Spillage or flooding of water
2500/08	Sticking or clogging of ice
2600/00	Control issues
2600/02	. Timing
2600/04	Control means
2700/00	Sensing or detecting of parameters; Sensors therefor
2700/02	. Level of ice
2700/04	. Level of water
2700/06	Rotation angle of the ejector ejecting ice from a stationary mould
2700/08	• Power to drive the auger motor of an auger type ice making machine
2700/08 2700/10	
	making machine Rotating speed of the auger motor of an auger type

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